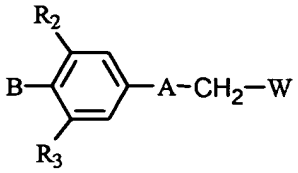
Claim 1. (Currently Amended) A compound of formula I

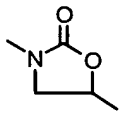
E1



I

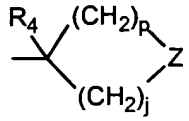
or a pharmaceutically acceptable salt thereof wherein:

A is a structure ~~i,~~ ii ~~, iii, or iv~~

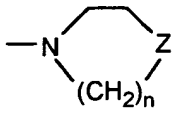


ii

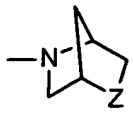
B is

(a) 

,

(b) 

, or

(c) 

;

W is NHC(=X)R_1, or -Y-het; X is O, or S; provided that when X is O, B is not the subsection (b);

Y is NH, O, or S;

Z is S(=O)(=N-R_5);

R_1 is

(a) H,

(b) NH_2,

(c) NHC_{1-4}alkyl,

(d) C_{1-4}alkyl,

(e) C_{2-4}alkenyl,

(f) OC_{1-4}alkyl,

(g) SC_{1-4}alkyl, or

(h) $(CH_2)_p C_{3-6}$cycloalkyl;

at each occurrence, alkyl or cycloalkyl in R_1 is optionally substituted with one or more F, Cl or CN;

R_2 and R_3 are independently H, F, Cl, methyl or ethyl;

R_4 is H, CH_3, or F;

R_5 is

(c) $C(=O)C_{1-4}$alkyl,

(d) $C(=O)OC_{1-4}$alkyl,

(e) $C(=O)NHR_6$, or

(f) $C(=S)NHR_6$;

R_6 is H, C_{1-4}alkyl, or phenyl;

at each occurrence, alkyl in R_5 and R_6 is optionally substituted with one or more halo, CN, NO_2, phenyl, C_{3-6} cycloalkyl, OR_7, $C(=O)R_7$, $OC(=O)R_7$, $C(=O)OR_7$, $S(=O)_mR_7$, $S(=O)_mNR_7R_7$, $NR_7SO_2R_7$, $NR_7SO_2NR_7R_7$, $NR_7C(=O)R_7$, $C(=O)NR_7R_7$, NR_7R_7, oxo, or oxime;

R_7 is H, C_{1-4}alkyl, or phenyl;

at each occurrence, phenyl is optionally substituted with one or more halo, ~~CF_3, CH_3~~, CN, NO_2, phenyl, C_{3-6} cycloalkyl, OR_7, $C(=O)R_7$, $OC(=O)R_7$, $C(=O)OR_7$, $S(=O)_mR_7$, $S(=O)_mNR_7R_7$, $NR_7SO_2R_7$, $NR_7SO_2NR_7R_7$, $NR_7C(=O)R_7$, $C(=O)NR_7R_7$, or NR_7R_7; **when R_5 is C_{1-4}alkyl substituted with phenyl, the phenyl is additionally optionally substituted with CF_3 and CH_3;**

het is a C-linked five- (5) membered heteroaryl ring having 1-4 heteroatoms selected from the group consisting of oxygen, sulfur, and nitrogen, or het is a C-linked six (6) membered heteroaryl ring having 1-3 nitrogen atoms;

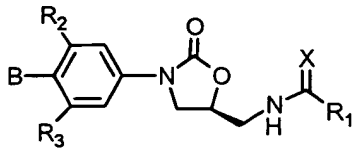
p is 0, 1, or 2;

j is 1, 2, 3, 4, or 5; provided that j and p taken together are 2, 3, 4 or 5;

m is 0, 1, or 2; and

n is 2 or 3.

Claim 2. (Previously presented) A compound of claim 1 having the formula IA:



IA.

Claim 3. (Original) A compound of claim 2 wherein R_1 is C_{1-4}alkyl.

Claim 4. (Original) A compound of claim 2 wherein R_1 is ethyl.

Claim 5. (Original) A compound of claim 2 wherein R_1 is methyl.

Claim 6. (Original) A compound of claim 2 wherein R_1 is C_{3-6}cycloalkyl.

Claim 7. (Original) A compound of claim 2 wherein R_1 is cyclopropyl.

Claim 8. (Currently Amended) A compound of claim 2, 3, 4, 5, 6, or 7 ~~2-7~~ wherein X is a sulfur atom.

Claim 9. (Currently Amended) A compound of claim 2, 3, 4, 5, 6, or 7 ~~2-7~~ wherein X is an oxygen atom.

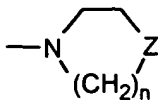
Claim 10. (Original) A compound of claim 8 wherein one of R_2 and R_3 is H, the other one is F.

Claim 11. (Original) A compound of claim 9 wherein one of R_2 and R_3 is H, the other one is F.

Claim 12. (Original) A compound of claim 8 wherein R_4 is H.

Claim 13. (Original) A compound of claim 9 wherein R_4 is H.

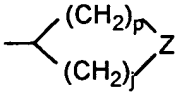
Claim 14. (Original) A compound of claim 8 wherein structure B is



wherein Z is $S(=O)(=NR_5)$.

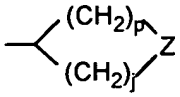
Claim 15. (Canceled).

Claim 16. (Currently Amended) A compound of claim 8 wherein structure B is



wherein Z is $S(=O)(=NR_5)$.

Claim 17. (Original) A compound of claim 9 wherein structure B is



wherein Z is $S(=O)(=NR_5)$.

Claims 18-21. (Canceled).

Claim 22. (Original) A compound of claim 14 wherein R_5 is $C(=O)C_{1-4}$alkyl, $C(=O)OC_{1-4}$alkyl, $C(=O)NH_2$, or $C(=O)NHC_{1-4}$alkyl.

Claim 23. (Original) A compound of claim 22 wherein R_5 is $C(=O)NHCH_3$, or $C(=O)NHCH_2CH_3$.

Claim 24. (Original) A compound of claim 14 wherein R_5 is $C(=O)CH_3$.

Claim 25. (Original) A compound of claim 14 wherein R_5 is $C(=O)OCH_3$.

E1

Claims 26-29. (Canceled).

Claim 30. (Original) A method for treating microbial infections comprising: administering to a mammal in need thereof an effective amount of a compound of formula I as shown in claim 1.

Claim 31. (Original) The method of claim 30 wherein said compound of formula I is administered orally, parenterally, transdermally, or topically in a pharmaceutical composition.

Claim 32. (Original) The method of claim 30 wherein said compound is administered in an amount of from about 0.1 to about 100 mg/kg of body weight/day.

Claim 33. (Original) The method of claim 30 wherein said compound is administered in an amount of from about 1 to about 50 mg/kg of body weight/day.

Claim 34. (Original) A method for treating microbial infections of claim 30 wherein the infection is skin infection.

Claim 35. (Original) A method for treating microbial infections of claim 30 wherein the infection is eye infection.

Claim 36. (Original) A pharmaceutical composition comprising a compound of claim 1 and a pharmaceutically acceptable carrier.

Claim 37. (Canceled)

Claim 38. (Original) A compound of claim 16 wherein R_5 is $C(=O)C_{1-4}$alkyl, $C(=O)OC_{1-4}$alkyl, $C(=O)NH_2$, or $C(=O)NHC_{1-4}$alkyl.

Claim 39. (Original) A compound of claim 38 wherein R_5 is $C(=O)NHCH_3$, or $C(=O)NHCH_2CH_3$.

Claim 40. (Original) A compound of claim 16 wherein R_5 is $C(=O)CH_3$.

Claim 41. (Original) A compound of claim 16 wherein R_5 is $C(=O)OCH_3$.

Claim 42. (Original) A compound of claim 17 wherein R_5 is $C(=O)C_{1-4}$alkyl, $C(=O)OC_{1-4}$alkyl, $C(=O)NH_2$, or $C(=O)NHC_{1-4}$alkyl.

Claim 43. (Original) A compound of claim 42 wherein R_5 is $C(=O)NHCH_3$, or $C(=O)NHCH_2CH_3$.

Claim 44. (Original) A compound of claim 17 wherein R_5 is $C(=O)CH_3$.

Claim 45. (Original) A compound of claim 17 wherein R_5 is $C(=O)OCH_3$.

Claim 46. (Previously Presented) A compound of claim 2 which is

N-({(5*S*)-3-[3-fluoro-4-[1-(acetylimino)-1-oxidohexahydro-1λ^4-thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)acetamide, *Z*-isomer;

N-({(5*S*)-3-[3-fluoro-4-[1-(acetylimino)-1-oxidohexahydro-1λ^4-thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)propanethioamide, *Z*-isomer;

N-({(5*S*)-3-[3-fluoro-4-(1-{[(methylamino)carbonyl]imino}-1-oxidohexahydro-1λ^4-thiopyran-4-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)propanethioamide, *Z*-isomer;

N-({(5*S*)-3-[3-fluoro-4-(1-[(methoxycarbonyl)imino]-1-oxidohexahydro-1λ^4-thiopyran-4-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)propanethioamide, *Z*-isomer;

N-({(5*S*)-3-[3-fluoro-4-(1-[[(ethoxycarbonyl)methyl]imino]-1-oxidohexahydro-1λ^4-thiopyran-4-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)propanethioamide, *Z*-isomer;

E1

N-({(5*S*)-3-[3-fluoro-4-(1-{[[(4-nitrophenyl)amino]carbonyl]imino}-1-oxidohexahydro-1λ^4-thiopyran-4-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)propanethioamide, *Z*-isomer;

N-({(5*S*)-3-[3-fluoro-4-[1-[(aminocarbonyl)imino]-1-oxidohexahydro-1λ^4-thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)propanethioamide, *Z*-isomer;

N-({(5*S*)-3-[3-fluoro-4-[1-[[(aminocarbonyl)methyl]imino]-1-oxidohexahydro-1λ^4-thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)propanethioamide, *Z*-isomer;

N-[((5*S*)-3-{3-fluoro-4-(1-[(methoxycarbonyl)imino]-1-oxido-1λ^4, 4-thiazinan-4-yl)phenyl}-2-oxo-1,3-oxazolidin-5-yl)methyl]propanethioamide;

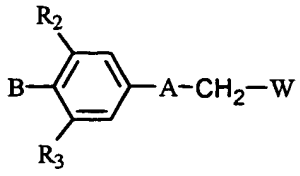
N-[((5*S*)-3-{3-fluoro-4-(1-[(methoxycarbonyl)imino]-1-oxido-1λ^4, 4-thiazinan-4-yl)phenyl}-2-oxo-1,3-oxazolidin-5-yl)methyl]cyclopropanecarbothioamide ;

N-[((5*S*)-3-{3-fluoro-4-[1-[(methoxycarbonyl)imino]-1-oxidohexahydro-1λ^4-thiopyran-4-yl]phenyl}-2-oxo-1,3-oxazolidin-5- yl)methyl] cyclopropanecarbothioamide, *Z*-isomer;

N-[((5*S*)-3-{3-fluoro-4-[1-[[(phenylmethoxy)carbonyl]imino]-1-oxidohexahydro-1λ^4-thiopyran-4-yl]phenyl}-2-oxo-1,3-oxazolidin-5-yl)methyl]acetamide, *Z*-isomer; or

N-({(5*S*)-3-[3-fluoro-4-(1-{[(benzylamino)carbonyl]imino}-1-oxidohexahydro-1λ^4-thiopyran-4-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)acetamide, *Z*-isomer.

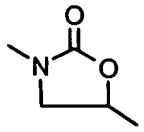
Claim 47. (Currently amended) ~~1.~~ A compound of formula II



II

or a pharmaceutically acceptable salt thereof wherein:

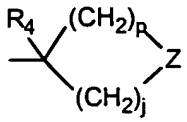
A is a structure ii



ii ;

E1

B is



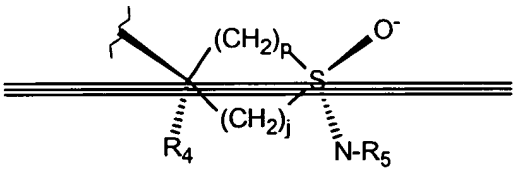
;

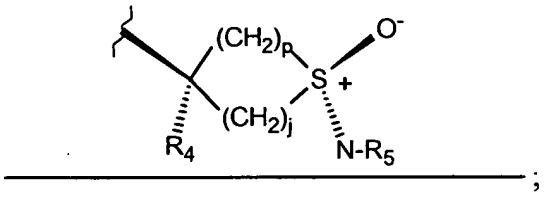
W is $NHC(=X)R_1$, or -Y-het;

X is O, or S;

Y is NH, O, or S;

Z is $S(=O)(=N\text{-}R_5)$ and the B ring has the following stereochemistry





;

R_1 is

(a) H,

(b) NH_2,

(c) $NHC_{1\text{-}4}$alkyl,

(d) $C_{1\text{-}4}$alkyl,

(e) $C_{2\text{-}4}$alkenyl,

(f) $OC_{1\text{-}4}$alkyl,

(g) $SC_{1\text{-}4}$alkyl, or

(h) $(CH_2)_p C_{3-6}$cycloalkyl;

at each occurrence, alkyl or cycloalkyl in R_1 is optionally substituted with one or more F, Cl or CN;

E1 R_2 and R_3 are independently H, F, Cl, methyl or ethyl;

R_4 is H, CH_3, or F;

R_5 is

(a) H,

(b) C_{1-4}alkyl,

(c) $C(=O)C_{1-4}$alkyl,

(d) $C(=O)OC_{1-4}$alkyl,

(e) $C(=O)NHR_6$, or

(f) $C(=S)NHR_6$;

R_6 is H, C_{1-4}alkyl, or phenyl;

at each occurrence, alkyl in R_5 and R_6 is optionally substituted with one or more halo, CN, NO_2, phenyl, C_{3-6} cycloalkyl, OR_7, $C(=O)R_7$, $OC(=O)R_7$, $C(=O)OR_7$, $S(=O)_mR_7$, $S(=O)_mNR_7R_7$, $NR_7SO_2R_7$, $NR_7SO_2NR_7R_7$, $NR_7C(=O)R_7$, $C(=O)NR_7R_7$, NR_7R_7, oxo, or oxime;

R_7 is H, C_{1-4}alkyl, or phenyl;

at each occurrence, phenyl is optionally substituted with one or more halo, ~~CF_3, CH_3~~, CN, NO_2, phenyl, C_{3-6} cycloalkyl, OR_7, $C(=O)R_7$, $OC(=O)R_7$, $C(=O)OR_7$, $S(=O)_mR_7$, $S(=O)_mNR_7R_7$, $NR_7SO_2R_7$, $NR_7SO_2NR_7R_7$, $NR_7C(=O)R_7$, $C(=O)NR_7R_7$, or NR_7R_7; **when R_5 is C_{1-4}alkyl substituted with phenyl, the phenyl is additionally optionally substituted with CF_3 and CH_3;**

het is a C-linked five- (5) membered heteroaryl ring having 1-4 heteroatoms selected from the group consisting of oxygen, sulfur, and nitrogen, or het is a C-linked six (6) membered heteroaryl ring having 1-3 nitrogen atoms;

p is 0, 1, or 2;

j is 1, 2, 3, 4, or 5; provided that j and p taken together are 2, 3, 4 or 5;

m is 0, 1, or 2;

~~and ==== in structure iii is either a double bond or a single bond~~.

Claim 48. (Previously presented) The compound of claim 47 wherein R_1 is C_{1-4}alkyl.

Claim 49. (Previously presented) The compound of claim 47 wherein R_1 is ethyl.

E1

Claim 50. (Previously presented) The compound of claim 47 wherein R_1 is methyl.

Claim 51. (Previously presented) The compound of claim 47 wherein R_1 is C_{3-6}cycloalkyl.

Claim 52. (Previously presented) The compound of claim 47 wherein R_1 is cyclopropyl.

Claim 53. (Currently Amended) The compound of claim 47 wherein X is a sulfur atom.

Claim 54. (Currently Amended) The compound of claim 47 wherein X is an oxygen atom.

Claim 55. (Previously Presented) The compound of claim 53 wherein one of R_2 and R_3 is H, the other one is F.

Claim 56. (Previously Presented) The compound of claim 54 wherein one of R_2 and R_3 is H, the other one is F.

Claim 57. (Previously presented) The compound of claim 47 wherein R_5 is H.

Claim 58. (Previously presented) The compound of claim 47 wherein R_5 is C_{1-4}alkyl, optionally substituted with OH; or C_{1-4}alkyl substituted with $C(=O)NHC_{1-4}$alkyl, $C(=O)NH_2$ or phenyl; wherein the phenyl is optionally substituted with OH, methyl, NO_2, CF_3, or CN.

Claim 59. (Previously presented) The compound of claim 47 wherein R_5 is CH_3, or ethyl.

Claim 60. (Previously presented) The compound of claim 47 wherein R_5 is C_{1-4}alkyl substituted with phenyl wherein the phenyl is optionally substituted with NO_2.

E1

Claim 61. (Previously presented) The compound of claim 47 wherein R_5 is $C(=O)C_{1-4}$alkyl, $C(=O)OC_{1-4}$alkyl, $C(=O)NH_2$, or $C(=O)NHC_{1-4}$alkyl.

Claim 62. (Previously presented) The compound of claim 47 wherein R_5 is $C(=O)NHCH_3$, or $C(=O)NHCH_2CH_3$.

Claim 63. (Previously presented) The compound of claim 47 wherein R_5 is $C(=O)CH_3$.

Claim 64. (Previously presented) The compound of claim 47 wherein R_5 is $C(=O)OCH_3$.

Claim 65. (Previously presented) A compound of claim 47 which is

N-({(5*S*)-3-[3-fluoro-4-(1-imino-1-oxidohexahydro-1λ^4-thiopyran-4-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)acetamide (Z)-isomer;

N-({(5*S*)-3-[3-fluoro-4-(1-imino-1-oxidohexahydro-1λ^4-thiopyran-4-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)ethanethioamide (Z)-isomer;

N-({(5*S*)-3-[3-fluoro-4-(1-imino-1-oxidohexahydro-1λ^4-thiopyran-4-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)propanethioamide (Z)-isomer;

N-({(5*S*)-3-[3-fluoro-4-(1-imino-1-oxidohexahydro-1λ^4-thiopyran-4-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)cyclopropanethioamide (Z)-isomer;

N-({(5*S*)-3-[3-fluoro-4-[1-(acetylimino)-1-oxidohexahydro-1λ^4-thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)acetamide, *Z*-isomer;

N-({(5*S*)-3-[3-fluoro-4-[1-(methylimino)-1-oxidohexahydro-1λ^4-thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)propanethioamide, *Z*-isomer;

N-({(5*S*)-3-[3-fluoro-4-[1-(acetylimino)-1-oxidohexahydro-1λ^4-thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)propanethioamide, *Z*-isomer;

E1

N-({(5*S*)-3-[3-fluoro-4-[1-(ethylimino)-1-oxidohexahydro-1λ^4-thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)propanethioamide, *Z*-isomer;

N-({(5*S*)-3-[3-fluoro-4-[1-[(phenylmethyl)imino]-1-oxidohexahydro-1λ^4-thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)propanethioamide, *Z*-isomer;

N-({(5*S*)-3-[3-fluoro-4-[1-[(3-phenylpropyl)imino]-1-oxidohexahydro-1λ^4-thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)propanethioamide, *Z*-isomer;

N-({(5*S*)-3-[3-fluoro-4-(1-{[(methylamino)carbonyl]imino}-1-oxidohexahydro-1λ^4-thiopyran-4-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)propanethioamide, *Z*-isomer;

N-({(5*S*)-3-[3-fluoro-4-(1-[(methoxycarbonyl)imino]-1-oxidohexahydro-1λ^4-thiopyran-4-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)propanethioamide, *Z*-isomer;

N-({(5*S*)-3-[3-fluoro-4-(1-[[(ethoxycarbonyl)methyl]imino]-1-oxidohexahydro-1λ^4-thiopyran-4-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)propanethioamide, *Z*-isomer;

N-({(5*S*)-3-[3-fluoro-4-(1-{[[(4-nitrophenyl)amino]carbonyl]imino}-1-oxidohexahydro-1λ^4-thiopyran-4-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)propanethioamide, *Z*-isomer ;

N-({(5*S*)-3-[3-fluoro-4-[1-[(aminocarbonyl)imino]-1-oxidohexahydro-1λ^4-thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)propanethioamide, *Z*-isomer;

N-({(5*S*)-3-[3-fluoro-4-[1-[[(aminocarbonyl)methyl]imino]-1-oxidohexahydro-1λ^4-thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)propanethioamide, *Z*-isomer;

N-({(5*S*)-3-[3-fluoro-4-[1-[(2-hydroxyethyl)imino]-1-oxidohexahydro-1λ^4-thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)propanethioamide, *Z*-isomer;

N-({(5*S*)-3-[3-fluoro-4-[1-(methylimino)-1-oxidohexahydro-1λ^4-thiopyran-4-yl]phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)cyclopropanecarbothioamide, *Z*-isomer;

N-[((5*S*)-3-{3-fluoro-4-[1-[(methoxycarbonyl)imino]-1-oxidohexahydro-1λ^4-thiopyran-4-yl]phenyl}-2-oxo-1,3-oxazolidin-5-yl)methyl]cyclopropanecarbothioamide, *Z*-isomer;

N-[((5*S*)-3-{3-fluoro-4-[1-[[(phenylmethoxy)carbonyl]imino]-1-oxidohexahydro-1λ^4-thiopyran-4-yl]phenyl}-2-oxo-1,3-oxazolidin-5-yl)methyl]acetamide, *Z*-isomer; or

N-({(5*S*)-3-[3-fluoro-4-(1-{[(benzylamino)carbonyl]imino}-1-oxidohexahydro-1λ^4-thiopyran-4-yl)phenyl]-2-oxo-1,3-oxazolidin-5-yl}methyl)acetamide, *Z*-isomer.

E'

Claim 66. (Currently Amended) A method for treating microbial infections comprising: administering to a mammal in need thereof an effective amount of a compound of formula II as shown in claim 47.